

encounter a few snails in the deeper waters during the period they actually hibernate. It appears that they were thrown there by some mechanical agent, rather than went by themselves to lead a life of semi-hibernation. With the onset of summer, the water slowly evaporates from the ponds and the lakes leaving the banks still soft and muddy. At this time they bore their way into the ground by the aid of their foot which is the main organ employed for digging and progression. In ditches where all the water dries up, the snails burrow into the bottom mud. With the return of the rains they come out through the softening of the mud surrounding their burrows.

It is also worth mentioning that when some hibernating snails were maintained in the laboratory aquarium in summer with hydrilla twigs as food, they became active, fed and passed faeces. On the other hand during winter, they only respired by projecting their siphons above the water level in the aquarium, but neither ate nor passed faeces. These snails may be more intolerant to cold than to heat. They are mostly herbivorous and their food consists of aquatic plants like *Hydrilla* and succulent plants like *Vallisneria* and *Pistia*.

DEPARTMENT OF ZOOLOGY,
UNIVERSITY OF LUCKNOW,
INDIA,
February 15, 1956.

B. B. SAXENA

REFERENCES

- Bahl, K. N. (1928): On the Reproductive Processes and Development of *Pila globosa* (Swainson). *Rec. Ind. Mus.*, **9**: 1.
Lal, M. B. & Saxena, B. B. (1952): Uricotelism in *Pila globosa* (Swainson). *Nature.*, **170**: 95.
Saxena, B. B. (1955): Physiology of Excretion in the Common Indian Apple-snail, *Pila globosa* (Swainson). *Jour. Anim. Morph. Physiol., Bombay*, **11** (2). 87-95—December.

31. THE HORNED HELMET, *CASSIS* *CORNUTA* LINN.—AN ADDITION TO THE LIST OF MARINE GASTROPODS OF BOMBAY

(With a photo)

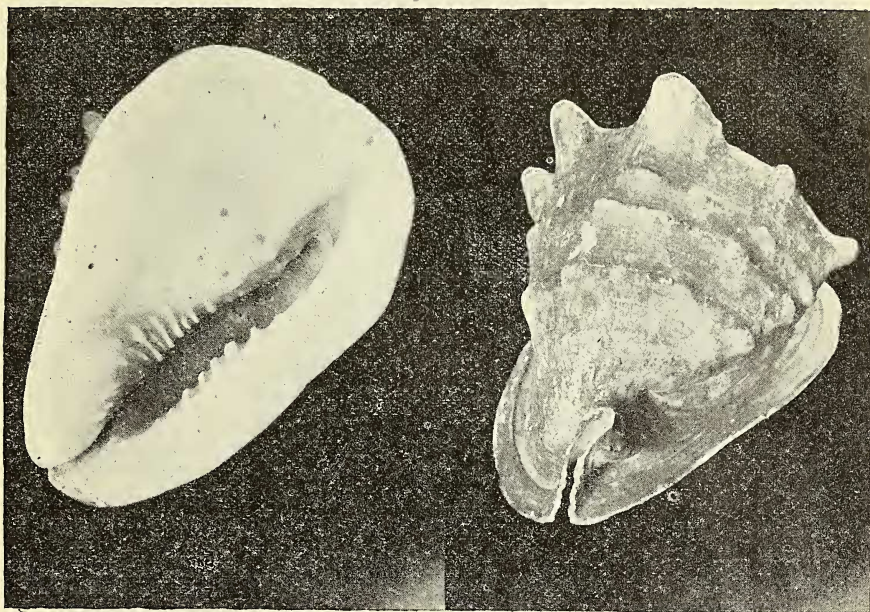
On 21 September 1955 one Shri Santosh Kumar, a diver, brought in a huge gastropod shell popularly called the Horned Helmet or Great Helmet-Shell or Elephant-Chank—*Cassis cornuta* Linn. (Cassididae) weighing 3 lb. which, he said, had been found at a depth of about 12 ft. in the Ballard Pier waters, Bombay.

This species has not been included in 'The Marine Mollusca of Bombay 1893' by James Cosmo Melvill and Alexander Abercrombie¹, or in the additional list of 25 new species by James Cosmo Melvill².

¹ Mem. & Proc. Manchester Literary & Philosophical Soc., Vol. 7, 4th series.

² Vol. 7, series 4.

Neither does it appear in 'The Marine Gastropoda of Bombay' by T. V. Subrahmanyam, K. R. Karandikar and N. N. Murthi¹.



Cassis cornuta Linn. is the largest and the heaviest in the genus *Cassis* and has a wide distribution ranging from Mauritius to Japan. In Indian waters it has been recorded from a depth of 8-10 fathoms on the Pearl Banks in the Gulf of Mannar, and also from the Coromandel Coast, the Maldives and the Andamans. Its distribution, according to Reeve, is 'Moluccas, West Indies and Pacific Islands'. It is not mentioned in Schepman's Siboga Expedition Monograph.

There is only one specimen of this species weighing 3 lb. 15½ oz. in the collection of the Zoological Survey of India, obtained from the Andamans. The molluscan collections of the Government museums of Madras and Travancore do not include this species.

The present seems to be the first specimen from Bombay waters and is therefore worth recording. It was very kind of the diver, Santosh Kumar, to have presented this rare and interesting shell to the Museum.

NATURAL HISTORY SECTION,
PRINCE OF WALES MUSEUM OF W. INDIA,
BOMBAY,
February 29, 1956.

V. K. CHARI,
Offg. Curator

[James Hornell in 'Indian Molluscs', p. 22 says: 'The larger Helmet-Shells (Cassididae) are represented in India by two species,

¹ Journ. Univ. of Bombay, Vol. xx, pt. 3, 1951.